



Application Serial No. 09/590,584  
 In re Patent No. 5,764,951  
 Patentees: LY et al.  
 Attorney Docket No. 4000/10

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Reissue Appl. No. : 09/590,584  
 Filed: : June 8, 2000  
 In re Patent to : Tai A. Ly et al.  
 Patent No. : 5,764,951  
 Issued : June 9, 1998  
 Title : METHODS FOR AUTOMATICALLY PIPELINING LOOPS

RECEIVED

FEB 13 2002

OFFICE OF PETITIONS

Box REISSUE  
 Assistant Commissioner for Patents  
 Washington, D.C. 20231

DECLARATION OF INVENTORS IN APPLICATION  
FOR BROADENING REISSUE OF PATENT

Pursuant to 37 CFR 1.63 and 1.175

This declaration is made in application for broadening reissue of the above-identified patent.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

**METHODS FOR AUTOMATICALLY PIPELINING LOOPS**

the specification of which: *(check one)*

☐ is attached hereto; or

☒ was filed on June 8, 2000 as U.S. Reissue Application Serial No. 09/590,584.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

Application Serial No. 09/590,584

In re Patent No. 5,764,951

Patentees: LY et al.

Attorney Docket No. 4000/10

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below:

- ☐ by reason of a defective specification or drawing.
- ☒ by reason of the patentee claiming more or less than he had the right to claim in the patent.
- ☐ by reason of other errors.

At least one error upon which this application for reissue is based is described as follows:

The limitation of claim 1 to methods comprising steps of parsing text descriptions including loops with delayed signal assignments having delay values and setting latencies of pipelines equal to said delay values is more limiting than necessary, and resulted in the patentee claiming less than he had a right to claim.

The limitation of claim 18 to systems comprising logic for parsing text descriptions including loops with delayed signal assignments having delay values and setting latencies of pipelines equal to said delay values is more limiting than necessary, and resulted in the patentee claiming less than he had a right to claim.

The limitation of claim 21 to computer program products comprising computer readable program code devices configured to cause a computer to effect parsing of text descriptions including loops with delayed signal assignments having delay values and setting of latencies of pipelines equal to said delay values is more limiting than necessary, and resulted in the patentee claiming less than he had a right to claim.

All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant.


I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Application Serial No. 09/590,584

In re Patent No. 5,764,951

Patentees: LY et al.

Attorney Docket No. 4000/10

Full Name of First Joint Inventor	Tai A. LY		
Inventor's Signature		Date	9/24/01
Residence	US	Citizenship	Canada
Post Office Address	1620 Campbell Avenue, San Jose, California 95125		

Full Name of Second Joint Inventor	David W. KNAPP		
Inventor's Signature		Date	
Residence	US	Citizenship	
Post Office Address	2107 North First Street, Suite 350, San Jose, California 95131		

Full Name of Third Joint Inventor	Ronald A. MILLER		
Inventor's Signature		Date	
Residence	US	Citizenship	Canada
Post Office Address	21957 Oakleaf Court, Cupertino, California 95104		

Full Name of Fourth Joint Inventor	Donald B. MACMILLEN		
Inventor's Signature		Date	
Residence	US	Citizenship	US
Post Office Address	2054 Seabrook Court, Redwood City, California 94065		



4000/10

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**RECEIVED**

**FEB 13 2002**

**OFFICE OF PETITIONS**

Reissue of Patent : 5,764,951, Tai A. Ly et al.  
Reissue Serial No. : 09/590,584  
Filed : June 8, 2000  
Title : METHODS FOR AUTOMATICALLY PIPELINING LOOPS

Box REISSUE  
Assistant Commissioner for Patents  
Washington, D.C. 20231

COMBINED CONSENT OF ASSIGNEE AND FILING PURSUANT TO 37 CFR 3.73(b)  
WITH POWER OF ATTORNEY

In Application for Broadening Reissue Pursuant to 37 CFR 1.171 et seq.

This is part of the application filed June 8, 2000 for broadening reissue of the above-identified United States Patent. The undersigned Applicant is assignee of the entire interest in the original patent and consents to the filing of this application for broadening reissue.

Applicant Synopsys, Inc., is a corporation organized under the laws of the state of Delaware and having offices at 700 East Middlefield Road, Mountain View, California, 94043-4033. Applicant is owner of the entire interest in the patent which is the subject of the proceedings herein pursuant to that assignment recorded at reel 7584, frame 0017 of the records of the United States Patent and Trademark Office on July 17, 1995. A copy of that assignment is attached hereto.

Applicant hereby appoints the following attorney(s) or agent(s), of the law firm Brown Raysman Millstein Felder & Steiner LLP, 120 West Forty-Fifth Street, New York, New York, 10036, its attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Jonathan T. Kaplan, Reg. No. 38,935  
Seth H. Ostrow, Reg. No. 37,410  
Anthony J. Natoli, Reg. No. 36,223  
Katrine A. Levin, Reg. No. 41,941  
Michael Malish, Reg. No. 41,968

Frank J. DeRosa, Reg. No. 26,543  
Louis J. Greco, Reg. No. 41,799  
Matthew J. Marquardt, Reg. No. 40,997  
Frederick Yu, Reg. No. 45,251  
Michael K. Kinney, Reg. No. 42,740

Please direct all correspondence to:

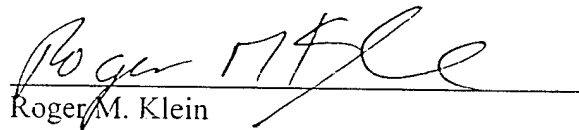
Brown Raysman Millstein Felder & Steiner LLP  
120 West 45<sup>th</sup> Street  
New York, New York 10036

Direct all telephone calls to: (212) 944-1515

The undersigned individual declares that he is authorized to execute this document on behalf of Applicant.

Respectfully submitted,  
Applicant Synopsys, Inc.  
by

Date: 7/26, 2000

  
Roger M. Klein  
Deputy General Counsel



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

DECEMBER 19, 1995

PTAS

3475.00003 (A 1994.049)



\*100053819A\*

GRAHAM & JAMES  
LAURA A. MAJERUS, ESQ.  
5 PALO ALTO SQUARE, SUITE 1000  
3000 EL CAMINO REAL  
PALO ALTO, CA 94306

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/17/1995

REEL/FRAME: 7584/0017  
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
LY, TAI A.

DOC DATE: 06/19/1995

ASSIGNOR:  
KNAPP, DAVID W.

DOC DATE: 06/16/1995

ASSIGNOR:  
MACMILLEN, DONALD B.

DOC DATE: 06/19/1995

ASSIGNOR:  
MILLER, RONALD A.

DOC DATE: 06/19/1995

ASSIGNEE:  
SYNOSPSY, INC.  
700 EAST MIDDLEFIELD ROAD  
MOUNTAIN VIEW, CALIFORNIA  
94043-4033

SERIAL NUMBER: 08440554  
PATENT NUMBER:

FILING DATE: 05/12/1995  
ISSUE DATE: \_\_\_\_\_

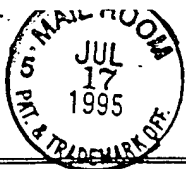
DATES ENTERED: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DEC 27 1995

PAGE 2

WILLIAM S. POWELL, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

**THIS PAGE BLANK (USPTO)**



FENT ID

08-29-95

Form PTO-1595  
1-31-92

08/25/95

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark OfficeRECORDATION FORM COVER SHEET  
PATENTS ONLY

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Tai A. Ly  
David W. Knapp  
Donald B. MacMillen  
Ronald A. MillerMRD  
7-17-95

## 2. Name and address of receiving party(ies):

Name: Synopsys, Inc.

Internal Address:

Additional name(s) of conveying party(ies) attached? ☐ yes ☒ no

## 3. Name of Conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other

Street Address: 700 East Middlefield Road

City: Mountain View State CA ZIP 94043-4033

Execution Date: June 16, 1995 and June 19, 1995

Additional name(s) & address(es) attached? ☐ yes ☒ no

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s) 08/440,554

B. Patent No.(s)

Additional numbers attached? ☐ yes ☒ no

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Laura A. Majerus, Esq.

Internal Address: Graham &amp; James

Street Address: 5 Palo Alto Square

Suite 1000

3000 El Camino Real

City: Palo Alto State: CA ZIP 94306

## 6. Total number of applications and patents involved: 1

## 7. Total fee (37 CFR 3.41): \$ 40.00

☒ Enclosed☐ Authorized to be charged to deposit account  
entire fee

## 8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

## DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Laura A. Majerus  
Name of Person SigningLaura Majerus  
Signature07/12/95  
Date

Total number of pages comprising cover sheet: 1

OMB No. 0651-0011 (exp. 4/94)

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks  
Box Assignments  
Washington, D.C. 20231



# ASSIGNMENT

(1) Tai A. Ly (4) Ronald A. Miller  
 (2) David W. Knapp (5) \_\_\_\_\_  
 (3) Donald B. MacMillen (6) \_\_\_\_\_

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

(7) Synopsys, Inc.  
 (8) Delaware Corporation  
 (9) of 700 East Middlefield Road, Mountain View, CA 94043-4033  
 (hereinafter designated as the Assignee) the entire worldwide right, title and interest in the invention known as  
 (10) "Methods for Automatically Pipelining Loops"  
S/N 08/440,554; filed 5/12/95 (Case No. Atty. Docket 34175.00003  
 for which the undersigned has (have) executed an application for patent in the United States of America

(11) on July 16 and July 19, 1995

1) The undersigned agree(s) to execute all papers necessary in connection with the application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute, any agreement in conflict herewith.

6) *The undersigned hereby grant(s)*

David L. Fehrman, Reg. No. 28,600; David L. Henty, Reg. No. 31,323; William J. Robinson, Reg. No. 29,430; Stuart L. Merkadeau, Reg. No. 33,262; Michael D. Scott, Reg. No. 27, 384; David B. Abel Reg. No. 32,394; Hisako Muramatsu, Reg. No. 34,955; Joseph T. Fitzgerald, Reg. No. 33,881; Brian M. Berliner, Reg. No. 34,549; David J. Meyer, Reg. No. 33,425; Mitchell P. Brook, Reg. No. 32,967; and Lawrence W. Granatelli, Reg. No. 32,228; Laura Majerus, Reg. No. 33,417; Bryn Ekroot, 38,129

the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

ate: June 19, 1995 Name of Inventor [Signature] (SEAL)

ate: June 16, 1995 Name of Inventor [Signature] (SEAL)

ate: 19 June 1995 Name of Inventor Donald B. MacMillen (SEAL)

ate: June 19, 1995 Name of Inventor Ron Miller (SEAL)

ate: \_\_\_\_\_ Name of Inventor \_\_\_\_\_ (SEAL)